

Response to Notification of Defective Response  
and Second Preliminary Amendment  
Application No.: 10/576,068

**Please delete the present Abstract of the Disclosure.**

**Please add the following new Abstract of the Disclosure:**

### **ABSTRACT OF THE DISCLOSURE**

A recombinant expression vector capable of expressing and secreting an antibody fragment fused with *E. coli* thermostable enterotoxin signal sequence derivative or *E. coli* outer membrane protein A (Omp A) signal sequence in the form of a soluble heterozygote protein is used to mass-produce the antibody fragment by culturing a microorganism transformed with the expression vector in a medium and collecting the antibody fragment secreted from the transformed microorganism into the medium